Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	ENGINE	FUEL TYPE 1	STANDARDS & TEST	INTENDED SERVICE	ECS & SPECIAL FEATURES 3	- EMISSIONS
		SIZES (L)		PROCEDURE	CLASS 2	ECM, EGR, OC, PTOX, DDI, TC,	
2008	8HMXH04.7JTF	4.7	Diesel	Diesel	LHDD	CAC	
ENGINE (	(L)		ENGINE MOD	DELS / CODES (rate	d power, in h	p)	
4.7		· <b>w</b> -	J05	D-TF / J05D-TF	(175)	· · · · · · · · · · · · · · · · · · ·	
+				*	<u>`                                    </u>		
*				*			
*				+			
CNG/LI L/WH I ECS=er up catalyst; TBl=throttle super charg control mod	NG=compressed/liquefied natu HDD=light/medium/heavy heav mission control system; TWC/K ; DPF=dissel particulate filter; e body fuel injection; SFI/MFI= ger CAC=charge air cooler; dule; EM=engine modification;	ral gas; LPG=liquefied y-duty diesel; UB=urb OC=three-way/oxidizin PTOX=periodic trap o sequential/multi port fue GR / EGR-C=exhaust 2 (prefix)=parallel; (2	d petroleum gas; E85=85% e an bus; HDO=heavy duty Olt g catalyst; NAC=NOx adsorp; sidizer; HO25/O25=heated/c lei injection; DGI=direct gaso gas recirculation / cooled EG 2) (sufflx)=in senes;	thanol fuel; MF=multi to; o; stion catalyst; SCR-U/ xxygen sensor; HAFS/ line injection; GCARB R; PAIR/AIR=pulsed/s	scR-N=selecti SCR-N=selecti AFS=heated/aii =gaseous carbu secondary air in	86.abc=Title 40, Code of Federal Regulations, S bi fuel; DF=dual fuel; FF=flexible fuel; ve catalytic reduction – urea / – ammonia; WU (infuel-ratio sensor (a.k.a., universal or linear oxyguretor; IDI/DDI=indirect/direct diesel injection; Tojection; SPL=smoke puff limiter; ECM/PCM=engletion; SPL=smoke puff limiter; SPL=smoke p	prefix) ≃warm- en sensor); C/SC=turbo/ pine/powentrain
10001112	ngine shutdown system (per 13 56.8(a)(6)(B) or for CNG/LNG i i7-12-20)	CCR 1956.8(a)(6)(A) fuel systems; N/A=not	(1); 30g≂30 g/hr NOx (per 13 i applicable (e.g., Otto engine:	CCR 1956.B(a)(6)(C); and vehicles);	ALT=alternativ	ve method (per 13 CCR 1956.8(a)(6)(D); Exemp	t=exempled per

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the EURO and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family. "Diesel" CO, EURO and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For flexible- and dual-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.).

in g/bhp-hr	NMHC		NOx		NMHC+NOx		со		PM		нсно	
	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO	FTP	EURO
STD	0.14	0.14	•	*	*	*	15.5	15.5	0.01	0.01	*	+
FEL	*	*	1.20	1.20	1.2	1.2	*		*	*	+	*
CERT	0.01	0.02	1.10	1.14	1.11	1.15	0.23	0.01	0.008	0.008	*	-
NTE	0.21		1.80		1.8		19.4		0.02			<u> </u>

\* g/bhp-hr=grams per brake horsepower-hour: FTP=Federal Test Procedure: EURO=Euro III European Steady-State Cycle, including RMCSET=ram mode cycle supplemental emissions testing: NTE=Not-to-Exceed; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde;

BE IT FURTHER RESOLVED: Certification to the FEL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

BE IT FURTHER RESOLVED: Except in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [30 g/hr NOx] and section 35.B.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" (HDDE Test Procedures) adopted Dec. 12, 2002, as last amended Sep. 1, 2006, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

BE IT FURTHER RESOLVED: The listed engine models have been certified to the split engine family standards under 13 CCR 1956.8(b) [diesel engines] or 13 CCR 1956.8(d) [Otto engines] and the incorporated 40 CFR 86.007-15(m)(9).

**BE IT FURTHER RESOLVED:** For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels) and 13 CCR 2035 et seq. (emission control warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

This Executive Order hereby supersedes Executive Order A-031-0061 dated December 21, 2007.

Executed at El Monte, California on this

\_ day of February 2008.

Annette Hebert, Chief

Mobile Source Operations Division